TABLE 1: AGENCY SUBMSSIONS & ToxFree Response

No	Key Points & Recommendations	ToxFree Response
1	**NSW Environment Protection Authority** NSW EPA reviewed the EA Submission and (our understanding of their) comments of 13 June 2017 is provided below: • Briefly summarises the proposed activities and BluBox air treatment system • Agrees with EA conclusion that operation of the BluBox treatment system would not adversely impact on air or water quality; • Considers the proposed modification is a low risk with respect to noise impacts • Recommends that the four roller doors, particularly the eastern door facing residences, be kept closed or fitted with fast opening/closing shutters to be operated from 5.00am to 7.00am and 10pm to 11pm where practicable, subject to safety and operational considerations. ToxFree is amenable to being Conditioned on the basis of this recommendation ie *"the four roller doors, particularly the eastern door facing residences, to be operated from 5.00am to 7.00am and 10pm to 10pm, be kept closed where practicable, subject to safety and operational considerations*" Note that the correct proposed operating hours are 5am to 10pm (see below).	
	NSW Department of Planning & Environment NSW DoPE reviewed the EA Submission and (our understanding of their) comments of 13 June 2017 is provided below:	
1	**Waste Processing** • Specify whether the 7200tpa of E-Waste is additional to the existing quantity of waste approved to be processed on site. Noted that Section 1.1 of the EA states that the proposed modification is not	MOD_2 assessed the processing the processing of fluorescent lamp resource recovery unit as a S75W Modification. This was approved by NSW DoP on 3 March 2010. NSW EPA issued a variation to EPL No. 12628 on 9 November 2010.

No	Key Points & Recommendations	ToxFree Response
	expected to significantly alter the development from that originally proposed. Provide details of current approval, capacity of the site to manage proposed quantities, and justification.	The limit of 7200tpa is the total proposed quantity for the site. There are no limits currently set for fluorescent lamp recycling in the EPL No 12628, or by the 2010 DoP approval. It is not unusual for no limits to be applied on processing, recycling and safe disposal dangerous or hazardous in order to encourage their safe management. However limits are applied to air discharges from the existing lamp processing limits (refer to EPL Clause L2). Current processing of fluorescent maps at the site is approximately 200 tpa, although this varies considerably with market requirements. Toxfree has applied for a limit of 7200 tpa based on the operating capacity of the BluBox-CIRRUS Units, predicted market demands, and site constraints. This equates to approximately 140 tonnes per week, or 28 tonnes per day (5 day average) Unprocessed materials will be unloaded and stored as per the existing arrangement (in containers adjacent along the eastern internal building wall), and in containers enabling loading into the BluBox. Processed material from the CIRRUS unit will be stored in skips prior to regular outloading from the site. The predicted market demand is based on consultation with agencies, customers, observed overseas trends and market intelligence. While it is difficult to always confidently predict market demand, this is considered to be a reasonable estimate. The main sources will be government agencies and larger corporations with strong recycling/energy efficiency policies, and Council recycling centres.
	Also address the types and quantities of chemical waste the Facility is currently approved to store on site, referencing approval conditions. Will the proposed impact on permitted maximum quantities.	No changes to the quantities of chemical waste to be received and processed on site are proposed, except e-waste as set out above. In all other respects, the full range of permitted maximum waste quantities, and proposed changes, are set out in the EA for MOD_3

No	Key Points & Recommendations	ToxFree Response
	If exceeded, to be supported by relevant explanation, documentation and updated PHA.	Table 2.3 (see attached).
2	**Waste Storage and/or Transfer** **Mercury** Provide details regarding the amount of mercury to be stored on site at any one time, current approvals, and management measures for handling and storage. PHA should provide worst-case consideration of scenario for maximum number of 205L drums Provide proposed storage location.	Fluorescent tube processing as approved in the initial Project Approval on 22 December 2006. Current projections indicate that a maximum of four (4) 205L drums of mercury will be filled each year, when operating at full processing at full capacity (7200 tpa). Each drum is immediately transported from site for safe disposal once it is filled. Therefore the PHA has modelled the worst-case scenario. Management measures for handling & storage of mercury will continue as currently carried out. These include staff-training, wearing mercury fitted masks and annual medicals, including mercury testing (full compliance to date). Incident management scenarios are included in the Emergency Management Plan (EMP) and Pollution Incident Response Management Plan (PIRMP), which are attached. These are updated annually as a minimum, and would be updated pending approval of MOD_3, in accordance with ToxFree's policy and certification requirements (see also attached). Procedures have proven appropriate and effective. All staff have been trained in their implementation, and procedures are well established, comply with all best-practice industry, State & Commonwealth HSE standards, and were the basis for the PHA Risk Analysis. Phosphor Powder (Mercury) is stored in 205L drums and currently sent to CMA Ecocycle in Victoria for recycling.

No	Key Points & Recommendations	ToxFree Response
	E-Waste Will E-waste be stored on site at anytime during the process? Relevant details are to be provided regarding storage method, location, quantity etc.	E-Waste will be delivered daily to the site in the void above primarily existing transport loads of other waste materials. E-waste will be stored in bins adjacent to the BluBox Processor (against the internal southern wall of the existing building), and processed daily. Processed product will be stored adjacent to the outlet of the CIRRUS unit, near the western side of the building (south-west door), facilitating prompt removal to transport. Due to the constrained nature of the site, ToxFree's operating philosophy is to minimise storage of both raw and processed materials.
	Provide details regarding the source of the E-Waste and types of materials to be processed.	The e-waste market continues to evolve quickly in NSW. As stated above, the main sources of existing e-waste are government agencies and larger corporations with strong recycling/energy efficiency policies, and Council recycling centres. This market is continuing to grow with rapid uptake of new digital technologies, awareness campaigns to minimise e-waste to landfills, energy market pressures, and the increase in e-waste recycling sites. For example, schools and universities are increasingly offering e-waste recycling bins, as are large technology retailers. Product stewardship programmes by large technology providers is a growing market that it is hoped will offer a key source of e-waste for processing and recycling.
	Will E-waste, other than lamps, contain mercury?	The primary source of mercury is fluorescent lamps. Small amounts of other e-waste to be processed may also contain minor amounts of mercury; this will also be captured in the air filtration system. The Blue Box is also capable of processing flat screen television sets and separating the plastics from the metals for downstream recycling. It is important to note the Blue Box process is not suitable for the processing of cathode ray tube (CRT) screens. This means the site will not be generating lead bearing glass fines or dusts with the suite of processes or the equipment available.

No	Key Points & Recommendations	ToxFree Response
3	**Waste Management** **Mercury** Provide details regarding the disposal of mercury, particularly any quantities additional to what is being generated e.g. changing/disposing of BluBox carbon filter and management of 205L drums containing mercury **Waste Outputs** Provide details where E-waste outputs will be transferred to off-site **Machinery** Provide details how the existing lamp processor will be disposed of.	There are several options for recycling the mercury contained in the 205L barrels. The primary method is to use distillation to recover the mercury from the phosphor for reuse. Toxfree evaluates recyclers within Australia and internationally based on commercial criteria, once it has verified that the recyclers have achieved and maintained all relevant HSE standards and regulatory requirements. Activated carbon filters are widely used in Australia in medical, water, air, transport and industry. There are a number of established carbon filter recyclers with standards. Carbon Filter recycling will be carried out in accordance with manufacturer's specifications and best-practice industry standards. Phosphor Powder (Mercury) is stored in 205L drums and currently sent to CMA Ecocycle in Victoria for recycling. The existing lamp processor will be mechanically and chemically cleaned, with all waste products and tested and managed in accordance with Toxfree SOPs and licence requirements. The re-sale market will be tested, although it is unlikely to be worthwhile as new technologies for processing have superseded this technology. Should re-sale not prove viable, the equipment will be scrapped and disposed of in accordance with Toxfree's licence requirements to an approved disposal facility.
4	**Car Parking, Access and Vehicle Movement**	
	Provide details of construction management e.g. vehicle access, movements and parking throughout construction and installation phases.	Modifications to the parking and access arrangements are relatively straight-forward civil works. Detailed design, specification and tendering will be carried out, followed by engagement of specialist contractors. A risk assessment will be carried out to highlight

No	Key Points & Recommendations	ToxFree Response
		management measures required to prevent hazards to both operational and construction workers. Carparking onsite will be limited during the works. Alternative parking in nearby streets, where there is ample room, and carpooling will be implemented. Deliveries will be escorted onto site by a dedicated spotter to ensure there is no interaction between construction works and operations. Work areas will be barricaded and clearly sign-posted. All operational and construction staff will be tool-boxed and forewarned of daily activities.
	Car Parking and Access Changes Details of specific works are required, including: • Detailed description of proposed changes	Installation of the weighbridge is a requirement of NSW EPA. In order to install the weighbridge, changes to access and carparking at the site were required to enable safe traffic flow and access. Dimensions of the proposed carparking and access changes are set out in the Plan C05: Carpark Line Marking Plan.
	• Total number of car parking spaces proposed	**Area A:** The existing carpark between the administration building and Christie St will be altered with a revised layout: three new carparks will be added to the existing nine (7 + 2) car spaces. Car spaces comply with Australian Standards. In summary, five (5) new spaces will be created, adding to the existing twenty four (24). This will readily meet the requirements of staff and visitors. **Area B:** The existing fifteen (15) carparks on the western boundary will be retained but moved west. Two (2) new carparks will be built, as shown on Plan C05, adjacent to the north.
	• Are the car parking spaces on the western boundary to be stacked?	No stacked carparking is proposed on the western boundary or elsewhere on the site.
	• Site Plan indicates car parking behind the flammable liquid storage area along western boundary. Amend or clarify	No parking is proposed between the flammable liquid storage and the western perimeter. This hatching was an error in the previous Plan submitted with the EA (apologies).

No	Key Points & Recommendations	ToxFree Response
	• Provide further environmental assessment of increased hardstand areas e.g. landscaping, stormwater drainage Amended EA to provide detailed plans illustrating existing and proposed works, compliance with AS, swept paths, directions of movement, and safe interaction between weighbridge and truck movements. Traffic report may also be required where works impact on road reserve and access to the site.	Increased run-off resulting from the extra hard paving has been calculated and assessed in the attached Taylor Thomson Whiting (TTW) Report. As stated in the EA, the existing bottlebrush will be retained if possible along the western boundary, or replaced with similar natives should they be adversely impacted during constriction. Dust and waste management measures are described in the EA, along with proposed mitigation measures. Please refer to the attached TTW report and accompanying Plans C02, C03, C04, C05. No work will be carried out on the road reserve. Should temporary access arrangements, or impacts on local traffic flows, be required during the construction phase, a Traffic Management Plan would be prepared and approvals sought from Council/RMS.
	Truck Movements Swept paths for truck movements required demonstrating; • Location of the weighbridge is suitable and will not have negative impact on safe manoeuvrability of trucks and cars within the site • Trucks delivering/picking up materials from the roller doors	Please refer to the attached TTW report and accompanying Plans C02, C03, C04, C05. The analysis demonstrates and concludes that the location is suitable, will not have a negative impact on safe manoeuvrability of trucks or cars. Line marking will be carried out, and spotters will be used for turning of heavy vehicles (largest semi-trailers). No storage would be allowed within the marked turning areas. Loading and unloading will be carried out when the trucks are parked between the weighbridge and existing building. All drivers will be inducted and tool-boxed in to safe site traffic movements and procedures. Swept path analysis (Plans C02 & C03) are conservative, and will be verified upon installation. Appropriate impact protection and signage will be installed as required. The Assessment concludes that the site and operations are suitable for the proposed traffic, access and parking arrangements.

No	Key Points & Recommendations	ToxFree Response
	Weighbridge Construction Specific details of weighbridge construction including manufacturing and engineering specifications, dimensions and plans.	Full details of the weighbridge specification are provided in Attachment 3.
5	**Construction and Operation** Provide clarification on the following:	
	Construction jobs to be generated	Following preliminary discussions with suitable contractors for mechanical, civil and electrical works, it is anticipated that installation would take approximately 4 weeks, and require 6 staff for this period.
	Length of construction times anticipated for installation of the BluBox and CIRRUS, construction of the weighbridge, carparking and access changes	Please see above.
	Is the CIRRUS Sorter Unit to be used exclusively for the BluBox outputs	Yes, the CIRRUS unit will be dedicated to the BluBox Processing unit.
	Will the location of the existing lamp processor to remain vacant once the processor is removed?	The location of the existing lamp processor will be used for storage of inert products.
	Where will E-waste be delivered prior to processing and picked up from after processing?	E-Waste will be delivered daily to the site in the void above primarily existing transport loads of other waste materials. E-waste will be stored in bins adjacent to the BluBox Processor (against the internal southern wall of the existing building), and processed daily. Processed product will be stored adjacent to the outlet of the CIRRUS unit, near the western side of the building (south-west door), facilitating prompt removal to transport. Due to the constrained nature of the site, ToxFree's operating philosophy is to minimise storage of both raw and processed materials.
	Discrepancies between proposed additional truck movements (e.g. EA pages 3 & 19)	E-waste will be primarily transported to the site in the voids above existing loads. The Noise Impact Assessment (Appendix D to EA)

No	Key Points & Recommendations	ToxFree Response
		modelled two (2) additional truck loads per day, or four (4) additional truck movements per day, at full capacity of 7,200 tonnes per year. We acknowledge the inconsistency in the EA (Section 5.3.3, page 19, of the EA states two (2) additional truck movements per day). The conservative assumption of four (4) additional movements per day is assumed for the Noise Impact assessment, which concludes compliance with the NSW Industrial Noise Policy.
	Drainage: Site Plan indicates an increase in the hardstand/impervious area of the site. Stormwater drainage plan required, including pre-development and post-development calculations	Please refer to the attached TTW report
	Clarifications Required:	
	EA states that BluBox and CIRRUS would operate during approved Facility hours of operation. Should MOD3 be approved, clarify proposed hours of operation.	The existing approved operating hours are 6 am to 6 pm, seven days per week. The EPA Licence for the Site, EPL No. 12628, does not set out operating hours, however Clause L4 states "Noise from the premises must comply with the relevant criteria of the NSW Industrial Noise Policy 2000". The MOD_3 EA (PEP Consulting, 2016), proposes to modify the operating hours to 5am to 10pm, seven days per week (EA, section 2.2). The Noise Impact Assessment (Appendix D to MOD_4 EA, ANE 2017) modelled operating the BluBox and CiRUUS unit from 5 am to 11 pm (Monday to Friday), and concluded compliance with the NSW Industrial Noise Policy 2000. The correct proposed operating hours are 5am to 10pm, Monday to Friday, for MOD_4. Therefore the Noise Impact Assessment modelled an additional duration of operation, which was incorrect but conservative. The results conclude compliance with the NSW Industrial

No	Key Points & Recommendations	ToxFree Response
		Noise Policy 2000.
	The Noise Assessment report states proposed hours of operation to be 5am-11pm, which is inconsistent with the hours of operation (both current and proposed)	Please see above.
	Clarify truck movements (page 3 & page 19 of EA)	E-waste will be primarily transported to the site in the voids above existing loads. The Noise Impact Assessment (Appendix D to EA) modelled two (2) additional truck loads per day, or four (4) additional truck movements per day, at full capacity of 7,200 tonnes per year. We acknowledge the inconsistency in the EA (Section 5.3.3, page 19, of the EA states two (2) additional truck movements per day). The conservative assumption of four (4) additional movements per day is assumed for the Noise Impact assessment, which concludes compliance with the NSW Industrial Noise Policy.
	Section 5.2 of ES states no proposed changes to staff numbers, however application form states an additional two (2) operational jobs created.	Initial operations will be carried out by existing staff. Should increasing market demand (ie 7,200 tpa) result in two full shifts of operation, two (2) additional operational staff will be employed.
	Further justification required for "In response to the increase in the (E-waste) market".	The e-waste market continues to evolve quickly in NSW. The main sources of existing e-waste are government agencies and larger corporations with strong recycling/energy efficiency policies, and Council recycling centres. This market is continuing to grow with rapid uptake of new digital technologies, awareness campaigns to minimise e-waste to landfills, energy price escalation, and the increase in e-waste recycling sites. For example, schools and universities are increasingly offering e-waste recycling bins, as are large technology retailers. Product stewardship programmes by large technology providers is a growing market that it is hoped will offer a key source of e-waste for processing and recycling.
	Penrith City Council Council reviewed the EA Submission and (our understanding of their) comments of 14 June 2017 is provided below:	

No	Key Points & Recommendations	ToxFree Response
	Engineering Considerations Provide explanation for the "extra extension" on the plans. Explain the areas noted as 52m2, 40m2 and 215m2. Will existing carpark remain? If so, the stacked carparking should be employee only.	The TTW Report and Plan CO5 provides full dimensions of the proposed car parking. The existing carpark will be retained but altered as set out in Plan CO5. No stacked parking is proposed.
	Full dimensions of all proposed parking areas should be provided to demonstrate compliance with Australian Standards	The TTW Report and Plan CO5 provides full dimensions of the proposed car parking in compliance with AS2890.1 Part 1.
	The driveway should be 5.5 m wide to provide for two-way movements	The driveway to Area A, Staff and visitor parking area between the administration block and Christie Street, has been redesigned and is now 5.5 metres wide. Two-way movement is not required or proposed for access to Area B parking, within the operational site.
	Provide swept path diagrams to demonstrate compliance with AS2890.1: Parking facilities Part 1: Off-street car parking.	The TTW Report and Plans CO3 & C04 set out swept path analysis and conclude compliance with AS2890.1 Part 1.
	Stormwater Drainage Plan Provide stormwater drainage plan to: • demonstrate the proposed impervious areas with finished surface levels along the western property boundary • stormwater connection pipes to be provided should water not be able to discharge to existing system • Drainage Plan should address WSUD and OSD requirements for increased impervious areas, to Council's Policy requirements	The TTW Report provides stormwater drainage and retention analysis for increased impermeable areas, drainage plan concept in accordance with Council's WSUD and OSD Policy requirements.

No	Key Points & Recommendations	ToxFree Response
	General Matters NSW EPA to confirm that proposed BluBox/Cirrus system has been suitably demonstrated, and that the technology and associated processes comprise best-practice in respect to both OHS and environmental considerations.	NSW EPA response to the MOD_4 EA (13 June 2017) sets out EPA's review and response, and endorsed the proposal, subject to certain conditions, stringent management and licence compliance.
	Noise Anomaly exists between EA and NIA in relation to proposed operating hours; • NIA: 5am to 11pm • EA: 5am to 10pm • NIA; no operations within during the night period. 11pm is within the night period.	The existing approved operating hours are 6 am to 6 pm, seven days per week. The EPA Licence for the Site, EPL No. 12628, does not set out operating hours, however Clause L4 states "Noise from the premises must comply with the relevant criteria of the NSW Industrial Noise Policy 2000". The MOD_3 EA (PEP Consulting, 2016), proposes to modify the operating hours to 5am to 10pm, seven days per week (EA, section 2.2). The Noise Impact Assessment (Appendix D to MOD_4 EA, ANE 2017) modelled operating the BluBox and CIRUUS unit from 5 am to 11 pm (Monday to Friday), and concluded compliance with the NSW Industrial Noise Policy 2000. The correct proposed operating hours are 5am to 10pm, Monday to Friday, for MOD_4. Therefore the Noise Impact Assessment modelled an additional duration of operation, which was incorrect but conservative. The results conclude compliance with the NSW Industrial Noise Policy 2000.
	NIA should include the predicted noise from the proposed MOD3 Hazpack machine, and any other associated sources, in the southwest corner of the site	The Noise Impact Assessment (Appendix D to MOD_4 EA, ANE 2017) was carried out in accordance with established NSW EPA standards, and included many conservative assumptions for noise generation. Compliance with the NSW Industrial Noise Policy 2000 was concluded. Should the MOD_3 proposed be approved, the cumulative noise impact

No	Key Points & Recommendations	ToxFree Response
		of the MOD3 Hazpack machine, and any other associated sources, in the southwest corner of the site, is anticipated to be negligible. Compliance with the EPA Licence for the Site, EPL No. 12628, will be required and monitored, specifically Clause L4 "Noise from the premises must comply with the relevant criteria of the NSW Industrial Noise Policy 2000".
	Air Quality Management Air Quality Impact Assessment should be included Waste Management Plan should be prepared and submitted.	NSW EPA response to the MOD_4 EA (13 June 2017) sets out EPA's review and conclusions, particularly regarding air, noise and water impacts. NSW EPA endorsed the MOD_4 proposal, subject to certain conditions, stringent management and licence compliance. Waste Management Plan now included (see Attachment 4).

Attachment 1: MOD_3 EA, with Table 2.2 setting out approved waste storage limits

Attachment 2: TTW Traffic and Stormwater Report (including Plans C02, C03, C04 & C05).

Attachment 3: Weighbridge Specifications

Attachment 4: Waste Management Plan

Attachment 5: Emergency Response Plan (ERP)

Attachment 6: Pollution Incident Response Management Plan (PIRMP)

Attachment 7: EMS Certification to ISO 14001:2004 (Certificate CEM21573 20140903)

Attachment 8: OHS Certification to AS/NZS 4801:2001 (Certificate OHS21124 20140903)

Attachment 9: QMS Certification to ISO 9001:2008 (Certificate QEC28212 20140903)

Attachment 1: MOD_3 EA, with Table 2.2 setting out approved waste storage limits

2.3 Storage Limits

To facilitate operation of the proposed acid alkali neutralisation plant, storage quantities of acid and alkali require increasing. The proposed increased storage limits correspond with the Dangerous Goods Licencing criteria as shown in Table 2.2 below.

Table 2-2 Waste storage limits

Dangerous good	Maximum storage quantity currently approved[1]	Proposed maximum quantity	Exceed SEPP33 Threshold[2]
Class 2.1	500kg	15 tonne	✓
Class 2.2	Not currently approved	5 tonne	X
Class 2.3	Not currently approved	100kg	X
Class 3	92,000L	92,000L	✓[3]
Class 4.1	10kg	3 tonne	X
Class 4.2	10kg	3 tonne	✓
Class 4.3	10kg	1 tonne	✓
Class 5.1	200kg	5 tonne	✓
Class 5.2	200kg	1 tonne	X
Class 6.1	10.5 tonne	25 tonne	✓[3]
Class 6.2	Not currently approved	5 tonne	✓
Class 8 - Acidic	5,000 L	35,000 L	✓[3]
Class 8 – Basic	5,000 L	25,000 L	✓[3]
Class 9	500kg	25 tonne	N/A
C2 - Combustible Liquids	2,000L	5,000L	✓[3]
Cyanide (Toxic Liquid Organic NOS)	9,900L	10,000L	✓[3]

[1] Project Approval 06_0095 as modified on 3rd March 2010.

[2] Exceeds screening thresholds of Table 1 of NSW Planning *Hazardous and Offensive Development Application Guidelines – Applying SEPP33.*

[3] Pre-existing threshold exceedance.